

**WHAT IS CLAIMED IS:**

1. (Currently Amended) An integrated process for the treatment and valorization of organic waste, said process comprising the steps of:
  - a) treating said organic waste with a microorganism treatment for producing gas;
  - b) separating the organic waste resulting from step a) into a liquid fraction and a solid fraction; and
  - c) using the liquid fraction resulting from step b) as a fertilizer wherein the process is carried out at atmospheric pressure.
2. (Original) The process of claim 1, wherein said microorganism is a bacterium.
3. (Original) The process of claim 1, wherein said microorganism treatment is an anaerobic bacterial treatment.
4. (Original) The process of claim 1, wherein said organic waste is animal manure.
5. (Original) The process of claim 1, wherein said animal manure is swine manure.
6. (Original) The process of claim 1, further comprising a step of drying the solid fraction resulting from step b) between step b) and step c) or after step c).
7. (Original) The process of claim 1, further comprising a step of burning the solid fraction resulting from step b) between step b) and step c) or after step c).
8. (Original) The process of claim 1, further comprising a step of using said gas resulting from step a) as an energy source.
9. (Original) The process of claim 9, wherein said energy source is for at least one of electricity generation and heat generation.
10. (Original) The process of claim 8, further comprising a step of purifying said gas resulting from step a) before the step of using said gas as an energy source.

11. (Original) The process of claim 10, wherein said step of purifying consist in the reduction of hydrogen sulfide content from said gas.
12. (Original) The process of claim 11, wherein said reduction varies between 60% and 85% for a full digestion cycle.
13. (Original) The process of claim 11, wherein said reduction is of about 85% for a full digestion cycle.
14. (Original) The process of claim 1, wherein said solid fraction resulting from step b) is used as an energy source.
15. (Original) The process of claim 14, wherein said energy source is for at least one of electricity generation and heat generation.
16. (Currently Amended) ~~Use of a~~ A liquid fraction obtained from the solid liquid separation of an organic waste previously treated by a microorganism treatment for use as a fertilizer.
17. (Currently Amended) The ~~use~~ liquid fraction as claimed in claim 16, wherein said microorganism is a bacterium.
18. (Currently Amended) The ~~use~~ liquid fraction as claimed in claim 16, wherein said treatment is an anaerobic bacterial treatment.
19. (Currently Amended) The ~~use~~ liquid fraction as claimed in claim 16, wherein said organic waste is animal manure.
20. (Currently Amended) The ~~use~~ liquid fraction as claimed in claim 19, wherein said animal manure is swine manure.